

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. – 47. (Cancelled)

48. (Currently Amended) A subscriber interface unit for use in a telecommunication system including a digital switch, a local loop coupling the digital switch to a subscriber location, wherein a segment of the local loop includes copper twisted pair and wherein an asymmetrical digital subscriber line is carried by the local loop, the asymmetrical digital subscriber line including a plurality of derived digital telephone lines, the subscriber interface unit for coupling the asymmetrical digital subscriber line to an analog land-line telephone, the subscriber interface unit comprising:

a housing ~~having a top surface and a bottom surface substantially coplanar to the top surface;~~

an electrical coupler, coupled to the housing for connection to a cable carrying the asymmetrical digital subscriber line;

~~an RJ-11~~ a telephone jack, coupled to the housing, for connection to a cable of the analog telephone; and

a converter, coupled to the electrical coupler and to the ~~RJ-11~~ telephone jack, for converting the first analog signals generated by the analog telephone into a first plurality of data packets for transmission to a selected one of the plurality of derived digital telephone lines and for converting a second plurality of data packets received from the selected one of the plurality of derived digital telephone lines into a second analog signal for transmission to the analog telephone; and

a smart card interface unit positioned in the housing, the smart card interface unit configured to receive a smart card defining an address for the subscriber interface unit.

49. - 52. (Cancelled)

53. (Original) The telecommunication system of claim 48 wherein the asymmetrical digital subscriber line further includes at least one data channel for carrying data signals not related to the plurality of derived digital telephone lines.

54. - 64. (Cancelled)

65. (New) The subscriber interface unit of claim 48, wherein the smart card interface unit is configured to receive a smart card compatible with PCMCIA standards.

66. (New) The subscriber interface unit of claim 48, further comprising a processor in communication with the smart card interface unit and adapted to automatically download address information received from a smart card and register a user with the telecommunication system over the asymmetrical digital subscriber line.

67. (New) The subscriber interface unit of claim 48, further comprising a processor in communication with the smart card interface unit and adapted to download address information received from a smart card, wherein the subscriber interface unit is further adapted to register the address information for a user with the telecommunication system over the asymmetrical digital subscriber line in response to user action.

68. (New) The subscriber interface unit of claim 48, further comprising a button on the housing responsive to user activation to initiate a command option defined by smart card data received at the smart card interface unit.

69. (New) The subscriber interface unit of claim 68, wherein the command option comprises a device macro for performing a series of commands in response to a touch of the button.

70. (New) The subscriber interface unit of claim 48, wherein the subscriber interface unit is configured to receive a user's speed dial list from smart card data provided via the smart card interface unit.

71. (New) The subscriber interface unit of claim 48 further comprising a display device attached to the housing configured to display alphanumeric information relating to the selected one of the plurality of derived digital telephone lines.

72. (New) The subscriber interface unit of claim 71, wherein the display device is configured to display a status of a plurality of lines, at least one of which is the selected one of the plurality of derived digital lines.

73. (New) The subscriber interface unit of claim 72, wherein the display device is configured to display caller ID information regarding an incoming telephone call.

74. (New) The subscriber interface unit of claim 48, wherein the subscriber interface unit is configured to respond to derived digital telephone calls corresponding to multiple addresses.

75. (New) The subscriber interface unit of claim 74, wherein the addresses comprise IP addresses, URLs, ATM addresses or telephone numbers.

76. (New) The subscriber interface unit of claim 75, wherein the subscriber interface unit is capable of initiating more than two derived digital telephone lines.

77. (New) A subscriber interface unit for use in a telecommunication system including a digital switch, a local loop coupling the digital switch to a subscriber location, wherein a segment of the local loop includes copper twisted pair and wherein an asymmetrical digital subscriber line is carried by the local loop, the asymmetrical digital subscriber line including a plurality of derived digital telephone lines, the subscriber interface unit for coupling the asymmetrical digital

subscriber line to an analog land-line telephone, the subscriber interface unit comprising:

- a housing containing a processor;

- an electrical coupler, coupled to the housing for connection to a cable carrying the asymmetrical digital subscriber line;

- a telephone jack, coupled to the housing, for connection to a cable of the analog telephone; and

- software code stored in a computer readable medium in the subscriber interface unit, the software code comprising instructions for execution by the processor of the following steps:

 - converting the first analog signals generated by the analog telephone into a first plurality of data packets for transmission to a selected one of the plurality of derived digital telephone lines;

 - converting a second plurality of data packets received from the selected one of the plurality of derived digital telephone lines into a second analog signal for transmission to the analog telephone; and

 - downloading a plurality of smart card data via a smart card interface unit positioned in the housing and reconfiguring an address of the subscriber interface unit based on the plurality of smart card data.

78. (New) The subscriber interface unit of claim 77, wherein the instructions for execution by the processor further comprise instructions for automatically registering the address of the subscriber interface unit with the telecommunication system over the asymmetrical digital subscriber line after downloading the plurality of smart card data.

79. (New) The subscriber interface unit of claim 77, wherein the instructions for execution by the processor further comprise instructions for, in response to a user input, registering the subscriber interface unit with the telecommunication system over the asymmetrical digital subscriber line after downloading the plurality of smart card data.

80. (New) The subscriber interface unit of claim 77, wherein the instructions for execution by the processor further comprise instructions for, in response to receipt of smart card data via the smart card interface unit, configuring a button on the housing to initiate a command option defined by the smart card data in response to user activation of the button.

81. (New) The subscriber interface unit of claim 80, wherein the command option comprises a device macro for performing a series of commands.

82. (New) The subscriber interface unit of claim 77, wherein the instructions for execution by the processor further comprise instructions for automatically configuring the subscriber interface unit with a user's speed dial list from smart card data provided via the smart card interface unit.